



**WO 00/28897**

**PCT/GB99/03775**

- 14 -

5. A system according to any preceding claim, wherein the output storage area provides a numerical percentage body fat.
6. A system according to any preceding claim, wherein the relationship between the percentage body fat and first and second body dimensions is given by the equation:-

$$\text{Percentage Body Fat} = \left[ \frac{\left( \frac{R}{C_1} - L \right)}{C_2} \right] - L$$

where

R =	ribcage circumference
L =	leg index measurement
C1 =	constant
C2 =	constant

7. A system according to any preceding claim wherein the four legged mammal is a cat.
8. A lookup table for use in the system of any proceeding claim, comprising:
  - a first storage area storing therein entries of the first body dimension;
  - a second storage area storing therein entries of the second body dimension; and
  - an output storage area storing an indication of percentage body fat determined from a relationship between the first and second body measurements.

[illegible]

WO 00/28897

PCT/GB99/03775

- 15 -

9. A four legged domestic pet mammal target body weight determining system for determining a target body weight for a four legged mammal, comprising:

a system for measuring the percentage body fat of a four legged domestic pet mammal; and

a lookup table comprising a first storage area for storing entries of the percentage body fat, a second storage area for storing entries of body weight, and an output storage area storing an indication of the target body weight.

10. A system according to claim 9, wherein the relationship between the target weight and the percentage body fat is given by the equation:-

$$\text{Target weight} = 1.33 \times \text{Body weight (kg)} \times ((100 - \% \text{ body fat}) / 100)$$

11. A system according to claim 9 or 10, wherein the target weight is an ideal weight.
12. A system according to claim 9, 10 or 11, wherein the system for measuring the percentage body fat is a system according to any of claims 1 to 7.
13. A system according to any of claims 9 to 12, further comprising an additional output storage area storing an indication of an energy allowance.
14. A system according to claim 13, wherein the indication of energy allowance is a daily allowance in kcal/kg.
15. A system according to any of claims 9 to 14, wherein the four legged mammal is a cat.